Approved

Meter Number:93292
Location Name:MEDIO CANYON #5
Location:TN-24 RG-04
SC-25 UL-I
6 - Jicarilla
NMOCD Zone:OUTSIDE
Hazard Ranking Score:00

RATIONALE FOR RISK-BASED CLOSURE OF PRODUCTION PITS LOCATED OUTSIDE OF THE VULNERABLE ZONE IN THE SAN JUAN BASIN

This production pit location was ranked according to the criteria in the New Mexico Oil Conservation Division's Unlined Surface Impoundment Closure Guidelines and received a ranking score of zero. The estimated depth to groundwater is greater than 100-feet beneath ground surface (bgs), the pit is not in a well head protection area, and there are no surface water bodies within 1,000 horizontal feet of the pit location.

The primary source, discharge to the pit has been removed. There has been no discharge to the pits for at least 4 years and the pits have been closed for at least one year.

Each pit was backfilled with clean soil and graded in a manner to divert precipitation away from the excavated area. Minimal infiltration of rainfall is expected. Any rainfall that does infiltrate the ground surface must migrate through clean backfill before reaching the residual hydrocarbons.

There is no source material at the ground surface, so direct contact of hydrocarbons with livestock and the populous is not likely.

In general, outside of the vulnerable area and alluvial valleys, bedrock material is generally encountered within 20 feet of the ground surface. Bedrock material in the San Juan Basin consists of interbedded sandstones, shales and clays. According to Freeze and Cherry, 1979, the hydraulic conductivity of the bedrock material are as follows:

Sandstone	10^{-9} to 10^{-13} cm/sec
Shale	10^{-12} to 10^{-16} cm/sec
Clay	10^{-12} to 10^{-15} cm/sec

Based on this information, the residual hydrocarbons should not migrate to groundwater.

Natural process (bioremediation) are degrading the residual hydrocarbon to carbon dioxide and water and will continue until the source is gone, therefore minimizing any impact to the environment.

Based on the above information, it is highly unlikely that any source material will impact groundwater or ever find an exposure pathway to affect human health and therefore El Paso Field Services Company (EPFS) requests closure of this pit location.

EL PASO FIELD SERVICES

FIELD PIT SITE ASSESSMENT FORM

GENERAL

Meter: 93292 Location: Media Canyon #5
Operator #: 8367 Operator Name: Southland Royalty Co. P/L District: OJITD
Coordinates: Letter: I Section 25 Township: 24 Range: 4
Or Latitude _____ Longitude _____
Pit Type: Dehydrator ___ Location Drip: ✓ Line Drip: ___ Other: _____
Site Assessment Date: 6/23/94 Area: 08 Run: 73

SITE ASSESSMENT

NMOCD Zone: (From NMOCD Maps)
Inside ☐ (1)
Outside ☒ (2)

Land Type:
BLM ☐ (1)
State ☐ (2)
Fee ☐ (3)
Indian Jicarilla Apache

Depth to Groundwater
Less Than 50 Feet (20 points) ☐ (1)
50 Ft to 99 Ft (10 points) ☐ (2)
Greater Than 100 Ft (0 points) ☒ (3)

Wellhead Protection Area :
Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction? , or ; Is it less than 200 ft from a private domestic water source? ☐ (1) YES (20 points) ☒ (2) NO (0 points)

Horizontal Distance to Surface Water Body
Less Than 200 Ft (20 points) ☐ (1)
200 Ft to 1000 Ft (10 points) ☐ (2)
Greater Than 1000 Ft (0 points) ☒ (3)
Name of Surface Water Body _____
(Surface Water Body : Perennial Rivers, Major Wash, Streams, Creeks, Irrigation Canals, Ditches, Lakes, Ponds)
Distance to Nearest Ephemeral Stream ☐ (1) < 100' (Navajo Pits Only)
☐ (2) > 100'

TOTAL HAZARD RANKING SCORE: 0 **POINTS**

REMARKS

Remarks : Redline Book - Outside , Vulnerable Zone Topo - Outside
3 pits. Will close 1 Pit dry

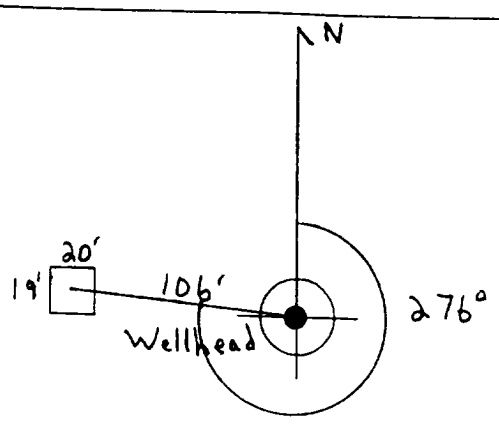
PUSH-IN

ORIGINAL PIT LOCATION

ORIGINAL PIT LOCATION

Original Pit : a) Degrees from North 276° Footage from Wellhead 106'

b) Length : 20' Width : 19' Depth : 3'



REMARKS

Remarks :

Pictures @ 1117 (9-12)

End Dump

Completed By:

Cory Chase
Signature

6/22/94
Date

FIELD PIT REMEDIATION/CLOSURE FORM

GENERAL

Meter: 93292 Location: MEDIO CANYON #5

Coordinates: Letter: I Section 25 Township: 24 Range: 4

Or Latitude _____ Longitude _____

Date Started : 10-3-95 Run: 08 73

FIELD OBSERVATIONS

Sample Number(s): DS104 _____ _____ _____

Sample Depth: 15 Feet

Final PID Reading 356 PID Reading Depth 15 Feet

	Yes	No
Groundwater Encountered	☐	☒

Approximate Depth _____ Feet

CLOSURE

Remediation Method :

Excavation ☒ Approx. Cubic Yards 300 CY 10/18/95

Onsite Bioremediation ☐ Gabrial Lic. E.P.O. approved. closure 10-9-95

Backfill Pit Without Excavation ☐

Soil Disposition:

Envirotech ☒ ☐ Tierra

Other Facility ☐ Name: _____

Pit Closure Date: 10-11-95 Pit Closed By: Philip

REMARKS

Remarks : PID READINGS: (N-3.9)(S-0.2)(E-0.4)(W-1.6)
Pit Size 29x23x15 Rock Bottom, Pit Lister outside W.V. ZONE
MORE THAN 100' FROM EPHEMERAL STREAM. E.P.N.G. (NORMAN) ONSITE
FENCE - 28x28x3 NO NET SPRAYED PIT WITH SOIL ENHANCER
10-9-95

Signature of Specialist: Nicholas Schmaltz

(SP3191) 03/16/94

El Paso Natural Gas Company

FIELD SERVICES LABORATORY
ANALYTICAL REPORT
PIT CLOSURE PROJECT - Soil Samples Inside the GWV Zone

SAMPLE IDENTIFICATION

	Field ID	Lab ID
SAMPLE NUMBER:	NS104	947~~74~~ 574 RLB 10/5/95
MTR CODE | SITE NAME:	93292	Medio Canyon #5
SAMPLE DATE | TIME (Hrs):	10-03-95	1115
PROJECT:	Air Pits	
DATE OF TPH EXT. | ANAL.:	10-4-95	
DATE OF BTEX EXT. | ANAL.:	10/4/95	10/4/95
TYPE | DESCRIPTION:	VG	Tan / Brown Fine Sand

Field Remarks: (N-8.1)(S-5.3)(E-6.7)(W-7.5)

RESULTS

PARAMETER	RESULT	UNITS	QUALIFIERS			
			DF	Q	M(g)	V(ml)
BENZENE	< 0.5	MG/KG				
TOLUENE	0.9	MG/KG				
ETHYL BENZENE	1.3	MG/KG				
TOTAL XYLENES	6.8	MG/KG				
TOTAL BTEX	9.0	MG/KG				
TPH (418.1)	32	MG/KG			2.13	25
HEADSPACE PID	19	PPM				
PERCENT SOLIDS	93.8	%				

-- TPH is by EPA Method 418.1 and BTEX is by EPA Method 8020 --

The Surrogate Recovery was at 93 % for this sample All QA/QC was acceptable.

Narrative:

DF = Dilution Factor Used

Approved By: _____ Date: 10-16-95

****
Test Method for
Oil and Grease and Petroleum Hydrocarbons
in Water and Soil

Perkin-Elmer Model 1600 FT-IR
Analysis Report
****

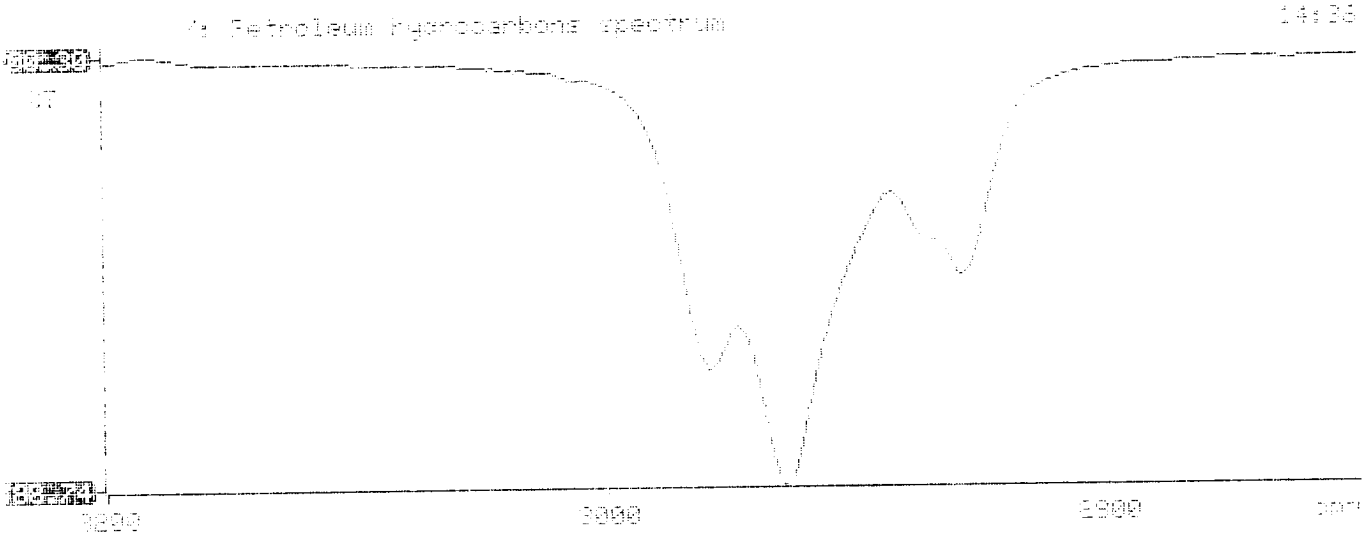
95/10/04 14:36

Sample identification
47574

Initial mass of sample, g
1.130

Volume or sample after extraction, ml
28.000

Petroleum hydrocarbons, ppm
27.295
Net absorbance of hydrocarbons (2930 cm-1)
.352



BTEX SOIL SAMPLE WORKSHEET

File	947574	**Date Printed**	10/5/95	
Soil Mass (g)	5.05	**Multiplier (L/g)**	0.00099	
Extraction vol. (mL)	10	**DF (Analytical)**	200	
Shot Volume (uL)	50	**DF (Report)**	0.19802	
				Det. Limit
Benzene (ug/L)	0.00	**Benzene (mg/Kg):**	**0.000**	0.495
Toluene (ug/L)	4.78	**Toluene (mg/Kg):**	**0.946**	0.495
Ethylbenzene (ug/L)	6.62	**Ethylbenzene (mg/Kg):**	**1.311**	0.495
p & m-xylene (ug/L)	28.60	p & m-xylene (mg/Kg):	5.663	0.990
o-xylene (ug/L)	5.90	o-xylene (mg/Kg):	1.168	0.495
		Total xylenes (mg/Kg):	**6.832**	1.485
		Total BTEX (mg/Kg):	**9.089**	

EL PASO NATURAL GAS
EPA METHOD 8020 - BTEX SOILS

File : C:\LABQUEST\CHROM001\100495-1.002
Method : C:\LABQUEST\METHODS\1-091895.MET
Sample ID : 947574,5.05G,50U
Acquired : Oct 02, 1995 12:17:24
Printed : Oct 04, 1995 13:32:10
User : MARLON

Channel A Results

COMPONENT	RET TIME	AREA	CONC (ug/L)
BENZENE	4.917	0	0.0000
a,a,a TFT	6.640	5244231	113.5919
TOLUENE	8.653	1278962	4.7779
ETHYLBENZENE	12.677	1665065	6.6150
M & P XYLENE	13.053	8943574	28.6263
O XYLENE	14.157	1399490	5.9038
BFB	15.737	67525568	93.1526